**Lightning Worksheet!**

**What is Lightning?**

1. What charge does the lightning bolt carry when it leaves the cloud? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. How does charge build up in a cloud?
3. How does charge build in the ground?
4. Can lightning strike from ground to cloud? Cloud to cloud? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. What characteristic of lightning create the explosion of sound known as thunder?

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1. What does a Lightning Rod do?

**Lightning Statistics**

1. Which state experiences the most thunderstorm days each year? What is the least number or thunderstorm days recorded in this state? What is the greatest number of thunderstorm days reported in this state?

2. During what month do the most deaths caused by lightning occur?

3. Approximately, how many people died from lightning in Pennsylvania during the summer (June, July and August)? Approximately how many people were injured from lightning during the summer?

4. What factor do you think could be responsible for the most lightning occurring in this state and during these months?

5. The Empire State building in NY is struck by lightning 100 times a year. What other

“Freaky Fact” can you find out about lightning?

**Lightning Explorer**

1. What time did you use lightning explorer?

2. Which states showed evidence of lightning?

3. Which state had the most lightning activity?

4. Which state(s) had the most recent lightning?

5. How can you tell this from looking at the map?

6. Did Florida experience any lightning in the last two hours?

**Things to know about Lightning Safety**

1. If you are [outside](http://www.srh.noaa.gov/mlb/ltgsafety/slide27.html) where are places you should AVOID seeking shelter?
2. Why shouldn’t you be near [trees](http://www.srh.noaa.gov/mlb/ltgsafety/slide27.html) during a thunderstorm storm?
3. How would you use the [30-30 lightning rule](http://www.floridadisaster.org/hwaw/day1/lightning.htm) to protect yourself from the dangers of

lightning?

1. Sound travels at 1,087 ft/sec. If you see a lightning strike and 10 seconds later you hear the thunder; how far away was the strike? How did you find this out?

**Lightning Related Injury and Deaths**

1. What are the top [five activities](https://www.patrick.af.mil/45og/45ws/LightningSafety/Ltng_Tips.htm) that result in lightning injuries?
2. What are [symptoms](http://www.nationalgeographic.com/lightning/4a.html) that occur after being struck by lightning?

**Lightning Myths – Fact or Fiction?** (Give an example or explanation)

1. Lightning can strike the same place twice. [Fact or myth?](https://www.patrick.af.mil/45og/45ws/LightningSafety/Ltng_Myths.htm)
2. If someone is struck by lightning, the person instantly dies. [Fact or myth](https://www.patrick.af.mil/45og/45ws/LightningSafety/Ltng_Myths.htm)?
3. If lightning is going to strike, the best way to protect yourself is by lying flat on the

ground. [Fact or myth?](https://www.patrick.af.mil/45og/45ws/LightningSafety/Ltng_Myths.htm)

1. If you touch an electrocuted person, you will also become electrocuted.